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AUTHOR Porter, Paige H.
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ABSTRACT

Three perspectives from which to study the implementation of educational innovation are explored in this document. Using the comparative policy perspective, the author compares and analyzes federal programs supporting educational change in the United States and Australia. Noting that Australia is more homogeneous, centrally organized, and oriented toward society seen collectively than is the United States, the author discusses how the increasing role of the federal government, the various forms of federal involvement, the relationships between different levels of government, the governmental policies on parochial and private education, and the "doctrine of transferability" affect educational change in both nations. From an organizational perspective, the author focuses on the implementation of innovations in schools as organizations, citing the results of a survey of the innovative projects funded by the Australian Schools Commission in Western Australia that had been underway for at least 2 years by 1976. This research explored four categories of characteristics possibly affecting the implementation of innovations: those of the innovation itself, the implementation strategies employed, the organizational settings, and the personnel involved. Finally, the author discusses how personal involvement in a series of case studies helped develop an interactionist perspective on the less objective characteristics of educational change. (PGD)

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POLICY PERSPECTIVES ON THE STUDY OF EDUCATIONAL INNOVATIONS
(Project Working Note)

Paige H. Porter
School of Education
Murdoch University
Perth, Western Australia

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Program Director: Michael W. Kirst
Professor of Education
Stanford University

Project Administrator: Jennifer B. Presley
School of Education
Stanford University

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INTRODUCTION

I have been concerned with the issue of educational change and the problems of implementing educational innovations for some time now. Why I have consigned myself to this particular purgatory is often beyond me. The subject is an incredibly messy one which sooner or later touches on almost all aspects of schooling. The literature is voluminous and confusing. The educational reform euphoria of the sixties and seventies has now passed and nearly everyone in the community is aware that it is not as easy as it looked. Nevertheless the concept of change lies at the heart of the educational process; it is what education is all about. Reduction in educational budgets will not make the problem of educational change go away; on the contrary it makes the problem even more critical. Rather than regard the situation as a crisis, however, we can regard it as an opportunity. Certainly the management of change during a period of decline is a more challenging problem than the management of change during a period of growth.

Having begun on this optimistic note I want now to consider several different perspectives on the study of educational innovations. Because of the complexity of educational change I have attempted to view the change process using three different perspectives in my own work. These include a comparative policy perspective, an organizational perspective and an interactionist perspective. Within each perspective I have focused primarily on the implementation stage of the change process. More specifically, using a comparative policy perspective I have tried to compare and analyze federal programs supporting educational change in the United States and Australia. Then, using an organizational perspective, I have attempted to examine through survey research some of the contextual

factors that may hinder or facilitate the implementation of change at the school level. I have also compared these with factors identified on the American scene. And finally, using an interactionist perspective and case studies, I have attempted to explore the different constructions of reality held by different relevant actors during the implementation of an innovation at the school level.

A Comparative Policy Perspective on Educational Innovations

Introductory Contrasts : Homogeneity vs Hetereogeneity and Centralization vs Decentralization

In looking at federal government efforts to support educational change in the United States and in Australia let me make a few background comments that are obviously gross generalizations but are relevant to keep in mind when comparing the two countries. Two of the areas of the greatest difference between America and Australia are their positions on two continuums: one a continuum of homogeneity/hetereogeneity, and another a continuum of centralization/decentralization.

The United States is a remarkably more hetereogeneous country than Australia, whether one is looking at the climate and the terrain or the ethnic and religious background of its citizens. It is also a considerably more decentralized one in terms of population spread, and political and economic power. There are many reasons for this which are related to geography and historical development which I will not go into now. However, these factors are clearly significant to the kinds of education systems which have developed within each country, as well as the problems faced at various stages by those systems.

Constitutional Responsibility for Education

In both the United States and Australia, the constitutional responsibility for education lies with the states by virtue of the fact that neither federal constitution mentions education and it is consequently a power reserved to the state governments. The difference is that in America the state governments delegated both the raising of education funds and the operation of the schools, to local school districts, while in Australia such responsibilities have remained with the state governments. This is hardly surprising when we consider that in 1789 at the time of American federation it was not considered appropriate for any government to get involved in education, whereas by 1900 and Australian federation the colonial governments had already established systems of education that were - more or less - free, compulsory and secular. Thus the American educational system grew organically as people spilled across the land and wanted their own schools, while the Australian education system developed more systematically along with other services provided by the centralized colonial governments in each colony.

Egalitarianism : Individualism vs Collectivism

Related to these different patterns of the development of formal schooling are different interpretations of the meaning of equality and hence equality of educational opportunity in two democratic nations both of which pride themselves on the virtues of their particular brand of "a free society." In general the differences can be described as a contrast in the emphasis placed on individualism versus collectivism with American remaining stubbornly individualistic and Australia more collectivist. While both countries have egalitarian value systems, this different emphasis has allowed Australians to marry equality of educational opportunity with

strong centralized bureaucracies. Thus the state education departments have consolidated and grown to a large extent in the interests of providing equality of educational services across vast sparsely populated areas. Until recently Americans have been more concerned to emphasize the value of the democratic process in education by keeping their schools under local and hence diverse control rather than stressing equality of the educational product. The monopoly on Australian education held by the large state departments has significant implications for federal government efforts to introduce innovations in the "department's schools."

Also connected with these different interpretations of egalitarianism are different expectations of education. Education has been a religion to the idealistic American precisely because it is the vehicle through which individualism can operate. Asserting individualism means "getting ahead" and that means of one's neighbors. The more pragmatic Australian certainly believes in everyone "getting their fair share" and in being able to "have a go" but getting ahead of one's neighbor is another matter. One's neighbors are one's mates and group solidarity is more the norm. In any event most people need only what Partridge (1968) once called "the basic wage of education."

The Increasing Role of the Federal Government in Education

With these background observations in mind it is interesting to trace the increasing role of the federal government in education in Australia and America. In both countries the pattern of growth progressed very slowly over the twentieth century and can be characterized as incremental and *ad hoc* in nature punctuated with bursts of activity related to societal crises. Hence in both Australia and the United States there was a

flurry of social legislation that related to youth and education during the Depression and the Second World War. But it was the "crisis" of the Soviet Sputnik that moved the respective federal governments into significant federal aid for the first time, in America with the National Defense Education Act of 1958 and in Australia, following leads from overseas, with the Science Laboratories Scheme of 1964. By 1965 the United States Congress had passed the Elementary and Secondary Education Act, a massive bill encompassing five sections, called Titles, which were to provide funds for the education of disadvantaged children, funds for educational materials, funds for supplementary educational centers and model programs, funds for research and development and grants to state education departments in order to strengthen them. Australia did not move to provide large scale aid until the election of the Whitlam Labor Government in 1972, the subsequent appointment of the Interim Committee for the Schools Commission chaired by Professor Peter Karmel, and finally the establishment of the Schools Commission in 1974 to implement the recommendations of that report. The programs introduced at that time were the General Recurrent Grants, the General Buildings Grants, Libraries, Disadvantaged Schools, Special Projects (Innovations) Program, Special Education and Teacher Development.

In considering the implementation of these kinds of federal programs from a policy perspective it is useful to begin with the observation that, in general, the people concerned with creating the policy and enacting the relevant legislation seldom look down the track to the implementation stage. Politicians and pressure groups are concerned to achieve the policy which they <u>want</u> and which they can <u>get</u> and this process in itself frequently involves some fairly creative manoeuvers, however, the divorce

of implementation from policy typically results in difficult, poor or even non-implementation primarily because, as Pressman and Wildavsky (1973) have pointed out, the events and their consequences occur in different organizations. Thus the basic framework for either political or bureaucratic learning is not present.

In looking at the implementation of any federal program one can classify the issues that are likely to be encountered in at least two ways, i.e. as political issues or as organizational issues. It is not possible to consider all the political and the organizational issues met by both governments in implementing their educational programs in this short paper. What I would like to do is to highlight some of these general concerns rather than to refer at length to the specific programs. I will consider political issues first.

Political Issues in Implementation

Modes of Federal Government Influence on Schools

In highlighting a few political issues that may emerge during implementation I should point out that national governments in federal systems have several options open to them if they wish to support or sponsor change in education at the school level. These have been well summarized by Michael Kirst (1976) for the American scene and they apply here as well. The modes through which influence can be attempted include:

1. Provide general aid - This is usually aid with either no strings attached or general support for salaries and buildings. In both countries general revenue sharing reflects the first type. In Australia the activities of the Commonwealth Grants Commission

are also relevant here. The Schools Commission's General Recurrent and Capitol programs, the largest of the Commission's activities, fit into the latter category.

2. Stimulate through differential funding - This involves earmarked grants to provide financial incentives, fund demonstration projects or purchase specific services. All of American ESEA fits into this category and the Schools Commission's programs in areas such as Special Projects - Innovations, Disadvantaged Schools, Special Education, and Services and Development reflect this approach. In America these are usually called categorical programs and in Australia specific purpose programs.

3. Regulate - This involves legally specifying behavior, imposing standards, certifying and licensing and enforcing accountability procedures. Programs in both countries involve some of this but there is far more regulation attempted from Washington than from Canberra. The accountability requirements of most of the ESEA compared with those of the bulk of the Schools Commission's programs are instructive in this area.

4. Discover and make available knowledge - This involves having research performed and making available data. Many agencies in both countries are involved in these activities, the two which are most exclusively concerned being the National Institute of Education in the United States and the Education Research and Development Committee in Australia.

5. Provide Services - This means to furnish technical assistance, consultants in specialized subjects, and materials. Agencies such as the Curriculum Development Center in Australia and the National Science Foundation in America are particularly significant in this area.

6. Exert moral suasion - This is defined as developing vision and questioning educational assumptions through speeches and publications. In Australia the Schools Commission and the Curriculum Development Center have both participated in these kinds of activities. In America the Office of Education, the National Institute of Education and the National Science Foundation are obvious examples.

Depending upon which mode a federal government employs different kinds of political issues may be encountered. It is likely that the political sensitivity of the first three modes, i.e. general or differential aid and regulation, will be greater than that of the last three, i.e. discovery of knowledge, provision of services and moral suasion. The issues which I want to highlight at this time are those associated with general federal/state relations in a federal political system, specific purpose or categorical aid versus general aid, church/state and public/private schooling issues, and what Ernest House has called the "doctrine of transferability." (1974)

Federal/State Relations and Educational Change in Federal Systems

While those of us who are used to living in federal systems of government take federalism for granted, it is still useful to emphasize what an enormously complex political system it actually is, particularly when one considers the problems of national governments in implementing educational change. While one tends to picture federalism as a nice and tidy layer cake with powers and responsibilities neatly ordered the reality is much more of a marble cake with layers swirled into each other seemingly at random

and everywhere unpredictable. Furthermore, while both the United States and Australia have superficially similar federal structures, in fact there are some very significant differences. In general these differences can be summarized by noting that there is a much higher potential for federal/state conflict in Australia than in the United States and that this has affected the implementation of federal programs in both countries.

The reasons for this higher potential for conflict in Australia are numerous and to some degree they are simply related to the degree to which centralization centralizes conflict as well as policy making. In Australia there are only seven (some would say two or three) real centers of power while in America there are dozens. However, more fundamentally, the more difficult federal/state relations can be attributed to three factors. Firstly, the combination of the Westminster system of government within a federal structure combines forms of government which are directly opposed to each other in a number of important ways. The Westminster system centers accountability in the cabinet around the twin concepts of ministerial responsibility and administrative responsibility through the permanent head of a department. But a federal structure is devised to dissipate responsibility amongst several layers of government precisely because it reflects ideological opposition to centralization of power. The combination of these two forms of government - a situation which does not prevail in the United States - encourages conflict among seven governments structured as though each and each alone is responsible and accountable. (Holmes & Sharman, 1977).

Related to this is the strong party system in the Australian Westminster tradition. The cohesiveness of the legislative parties ensures strong party conflict which is often accentuated when the national and the state governments are of different parties. The United States has a weak party system and hence this kind of federal/state party-based conflict occurs somewhat less often.

Another reason why federal/state relations are often more contentious in Australia relates to the fact that Australia is a functionally federal but fiscally unitary system. In this situation the states have a major responsibility for a variety of functions and services including education but the federal government has the power and ability to collect the substantial proportion of available tax funds. This situation is bound to create problems with the states feeling that their alternatives for action are limited by the funds that the national government will or will not provide. The United States is both functionally and fiscally federal to a much larger extent and consequently when the federal government wants to introduce educational change, it is more clearly spending its own money and the states can continue to raise and spend theirs.

Specific Purpose or Categorical Grants vs General Aid

Another political issue likely to emerge in the implementation of federal programs supporting educational change is that of specific purpose or categorical grants versus general aid. This is an extremely complex field and there are enormous financial implications in the issue, particularly when one introduces the role of revenue sharing in both countries, but I would simply like to mention some political

concerns. Specific purpose grants are sometimes criticised as resulting in uncoordinated educational funding and as having so many strings attached as to make an industry of compliance. While we have certainly heard criticism in Australia by state governments of federal strings tied to education grants, in reality both of these judgements are much more apropos of the American scene. All of the American programs are specific purpose programs and a patchwork of largely uncoordinated programs has indeed grown up over the years. These programs also have a well-deserved reputation for paperwork at every level. The Schools Commission, for better or worse, recommends the distribution of most of its funds in two basic categories, that of recurrent expenditures and capitol expenditures, and compared with the American programs the paperwork on these is extraordinarily minimal. Furthermore, as there is no comparable body to the Schools Commission (which is specifically concerned with an overview of education funding) within United States, there is more coordination of such federal programs here than on the other side of the Pacific. It may not be as great as some would like but it is certainly greater than in America.

On the American scene it has been politically difficult to pass any general educational aid and the existence of categorical programs reflects a political system where most legislation is composed of compromises. Given the political structure in Australia it was possible for a newly elected party to pass its educational package nearly intact with only a number of small if very significant changes.

While the American government must, to some extent live with compromise categorical grants, the Australian government would be likely to find it easier to shift entirely to some form of total general aid if it wished. However, this could raise problems of federal government accountability. At the moment, for example, the Schools Commission would find it much easier to demonstrate its accountability with its specific purpose programs than its general aid programs where the money is more or less turned over to the states at least in relation to government schools. Further, proponents of federal aid to education might worry that money not tied specifically to some kind of a program could be reduced more easily than earmarked funds as simply part of a budget cutting exercise. Various educational pressure groups who have fought for specific funds for "their" problem, such as Special Education, might also be less than convinced that they could obtain such funds from hard pressed state departments. It is also the case that while state governments might not like their priorities preempted with regard to education spending, state education departments do not have to bargain with other state departments for their share of tied grants. Finally, there is still the argument that there are national concerns in relation to education that make some guidelines in federal spending desirable.

However, it should stressed that arguments for specific purpose grants can be taken too far and probably have in America. The states <u>are</u> closer to the schools in many if not all ways and special local problems are not always evident to federal bureaucrats. Australia, in particular, has a long standing habit of thinking of itself in terms of two eastern cities and regarding the rest of the continent

as a somewhat exotic backdrop. I would argue that heavy-handed federal government control of aid to education is inappropriate in the 1980s for many reasons some of which I will explore in the next section.

Church/State and Public/Private Schooling Issues Towards the End of the Twentieth Century

A third area of political concern faced by federal governments in implementing programs aimed at educational change in both countries is the late twentieth century version of church/state and public/private issues with regard to education. Both constitutions specify the separation of church and state but such a principle has been interpreted differently in the two countries. The United States has, by and large, stayed out of the business of the large scale funding of private schools, church or otherwise. Recent Supreme Court interpretations suggest that this traditional view is becoming even stronger. In Australia, on the other hand, with the advent of the Schools Commission the federal government has gotten very much involved. While public opinion is by no means uniform about this and there is a long standing case in front of the High Court on the issue, the chances are still good that federal aid to non-government schools will remain a reality, if a contentious one.

It is interesting that very similar principles were advanced in both countries to "settle" this question at the beginnings of the growth in federal aid. In America the formula for success was the "child benefit theory" which emphasized that federal aid was intended to benefit children whatever kind of school, public or private that they

attended. In Australia it was the "needs principle" which proposed that the needs of children for adequate schooling should be met whatever kind of school, public or private that they attended.

However, the implementation of these principles has been considerably different in practice. In America the principle was used to provide categorical aid, the majority of which goes only indirectly to church related schools. Some resources like buses, books and other educational equipment are provided or made accessible for private school children and under the "shared services" concept the facilities of public schools can be used for private school students. The Australian government, however, has gone far beyond this "additional resources idea" and begun funding not only specific purpose programs but capitol works and recurrent expenses for the non-government sector (as well as the government sector.) The difference between the "needs principle" and the "child benefit theory" in practice is that the Australian government clearly funds schools while the American government more apparently funds children.

Both countries are currently facing problems in these areas. In Australia, primarily because state education departments have (unexpectedly) increased their spending on education, the original (1974) resource standards targets of the Schools Commission for government schools have been nearly met while, partially because of decreasing financial support in the private school sector, the "needs" of non-government schools have been increasing. Given the federal government's restrictions on the Schools Commission's budget, the "needs principle" is emerging as the primary vehicle for funding non-government schools.

It is likely that this will continue to create political problems in secular Australia. In the United States on the other hand, the situation is more complex but it also suggests that the issue is far from settled. To begin with the traditional local property tax base for educational finance is being threatened by state Supreme Court decisions declaring it to be unconstitutional on equity grounds. We are also seeing voter tax rebellions which, through referendum, are limiting the amount of local property taxes which can be raised for schools (as well as other local government services). These activities increase the powers of the state governments which find themselves attempting to develop more equitable funding arrangements for education. Hence the current re-emergence of the once dead voucher idea. For example, it is likely there will be a 1980 ballot measure on vouchers in California. Vouchers fund parents not public schools and the old issue of church and state is alive once more.

Furthermore, even without voucher schemes as state governments attempt to level educational spending across local school districts American parents who have traditionally avoided private schools precisely because they could "buy" a good education by moving into the right suburbs may feel that if they do not have a "public choice then they will want a private escape" (Clinchy & Cody, 1978).

One of the reasons for the smaller degree of pressure for government aid to private schools in America has been that less than ten percent of her students attend such schools while the figure in Australia is closer to twenty-five percent. It would appear that the "old" political problem of "state aid" has not been settled after all and will continue to haunt governments at all levels when they attempt to implement programs aimed at educational change.

The Doctrine of Transferability

I would also like to refer briefly to one final political issue associated with the implementation of innovative federal educations programs and that is what Ernest House (1974) has called the problems of the "doctrine of transferability". House defines this problem as the search for the magic solution in government policy on educational innovation, characteristic of an industrialized technocratic society which believes that "everything can be fixed." The assumption is made that the solution or innovation must be widely accepted and have highly generalizable results in different situations. Referring to the American experience, House points out that this is typical of what we now call the Research, Development and Diffusion model of educational change which is rightly discredited as a panacea for all educational ills. It is discredited for many reasons but most basically for being overly rational, for regarding the "consumer" as passive, and for empirically not effecting much change anyway. The alternative to the doctrine of transferability is to aid in the development of the local capacity for change. This involves avoiding heavy-handed top-down federal or state initiatives. It suggests programs which, while earmarked for innovation, do not closely specify and monitor the kinds of innovations attempted. It also suggests that the people who are the consumers must be involved in the control of the process of implementation.

At this point I would like to make the generalization that while these kinds of issues have most certainly been problems of the American government in sponsoring educational innovations they have been somewhat less problematic on the Australian scene primarily because the

Australian government has promoted school based activities of all kinds in its special purpose programs. However, the political and bureaucratic pressures to find and apply the "one best solution" are still very strong in Australia and need to be carefully watched. This has been a constant strain in several of the School's Commissions programs with many internal and external advocates arguing in favor of "magic solution policy" on cost-benefit grounds. Yet a major part of the reason for abandoning the R & D model rests with what we are discovering happens at the school level when attempts are made to implement educational innovations. I would like to turn now to my second perspective on educational innovations, the organizational perspective.

An Organizational Perspective on Educational Innovations

It is commonplace now for educational theorists to identify characteristics of schools as formal organizations and the ways in which they differ from other kinds of organizations. Many of these differences have important implications for the implementation of educational innovations. They include such factors as:

1. the unstable, multiple and contested goals of educational organizations;
2. the inadequate and unclear technology of teaching;
3. the complex, and unstable environment of schools and the accessibility of schools to outside pressures;
4. the monopoly nature of compulsory schooling and the consequent lack of incentives to compete.

Consideration of these kinds of factors tends to suggest what can happen when an "pure" innovation finds itself in this kind of "dirty" environment. It is in the nature of schools as organizations that innovations are "transformed." Consequently, many writers have suggested that to understand the process of innovation in educational organizations one needs to concentrate on what happens during the implementation stage - rather than the more commonly observed initiation stage - of the change process. In some ways this is the same observation that was made earlier about policy decisions but the focus now is turned to the school and organizational level. The point is, again, that what was intended seldom occurs exactly as planned.

Factors Related to Implementation at the School Level

In trying to better understand the factors which may affect the implementation of innovations at the school level, a survey of 95 innovative projects funded by the Schools Commission in Western Australia was conducted by the author. At the time of the survey, 1976-77, this was virtually all of the projects which had been underway for at least two years. A minimum of two people from each project were surveyed bringing the total sample to 207. This typically included the Project Director and one other person involved in the project. Multi-variate analysis was applied to the data.

This research was considered exploratory and four categories of possible factors affecting implementation were identified from the literature. These included:

1. characteristics of the innovation;
2. characteristics of the implementation strategies employed;
3. characteristics of the organizational settings;
4. characteristics of the personnel involved.

As the Innovations Program of the Schools Commission funds small projects on a competitive basis and people submit their own applications for the most part, it was hoped that an examination could be made of a situation unlike that described in most of the literature where change has been imposed from the top down. It was hoped to identify what factors were related to implementation when the old problems of overcoming initial resistance were, if not entirely absent, at least much reduced.

It is interesting to compare the results from this Australian study with the massive American study on federal programs supporting educational change conducted by the Rand Corporation in California, between 1974 and 1978, and popularly called the Rand Change Agent Studies. This study encompasses eight volumes, investigated both implementation and continuation, and utilized a national survey sample of 293 projects, and 29 case studies. (Berman & McLaughlin, 1978). Despite their differences in size the two studies utilized a very similar theoretical framework and investigated many identical issues. The findings are of particular interest as they point to very similar factors operating at the school level in the implementation of educational innovations in both countries. In this short paper a detailed description of both studies cannot be provided. Hence my intention will simply be to highlight some major areas of interest. The comparative results will be discussed below under the four relevant categories.

Characteristics of the Innovation

In general both the Australian and American studies found that the characteristics of the innovations in terms of their educational methods, subject areas dealt with, or project values were not

highly related to implementation. Rand looked at educational methods and found only a small relationship to implementation effects. Porter looked at subject areas and found only one area, language programs, related to implementation. Porter also looked at the project values as expressed in terms of the Schools Commission's priorities (such as projects that promote cultural pluralism, etc.) and found that there were only a few value areas related to implementation, these being projects intending to open up the school to the community, aboriginal education and projects trying to cope with the isolation of students. With these possible exceptions, it is likely that the actual kind of project is less important to its implementation than how it is implemented.

With regard to the level of resources, the Rand study found no relationship between the level of funding and implementation while Porter did find a positive relationship meaning that the more expensive projects reported better and easier implementation. However, this is one area where the comparison is difficult as the projects funded under the Innovations program are very much smaller in terms of financial resources than many of those funded under the American federal programs that Rand examined.

Characteristics of the Implementation Strategies

Both studies found that factors associated with the way in which a project was implemented at the school level were very important to the ease and success of the implementation. Porter found that the following factors hindered implementation effectiveness: not being the original applicant (a situation that usually occurs through high

rates of teacher mobility); not having the decision making power with regard to the project; implementing a project where the objectives were difficult for others in the school to understand; or where there was a complex implementation strategy that was difficult for others in the school to understand, and implementing a project which increased the workload of those involved. Porter also found the following factors facilitated implementation effectiveness: prior observation of an innovation; prior trial of an innovation; involvement in the implementation process; implementing a project where the results were easy to observe; implementing a project with student involvement.

Rand further identified a number of specific implementation strategies which were effective in implementation and which generally included on-site well-conducted teacher training that was directly relevant to the project and teacher participation in project decisions. Rand also coined the phrase "mutual adaptation" to describe the process by which the project is adapted to the reality of its institutional setting through implementation strategies which allow teachers time to get feedback, correct errors and build commitment.

Characteristics of the Organizational Settings

When looking at the formal structure of schools, Porter found that compatibility with the organizational structure was positively related to implementation, as was one element of a bureaucratic structure, the existence of rules. However, other indications of bureaucracy such as a hierarchy of authority and impersonality were

not related to implementation. Looking at the informal structure of schools Porter found that cooperation from the school administration, cooperation from the staff not directly involved in the project, cooperation from the students and cooperation from the system authority were all related positively to implementation as was a previous school history of innovation. Job satisfaction and perceived "rewards" received for the innovative projects were negatively related to implementation which may suggest that innovators are not the most content teachers in the schools. Rand also found that the quality of the working relationships in the schools, the active support of principals in particular, and the perceived effectiveness of project directors were important factors under the general category of organizational climate.

In addition both Rand and Porter found that secondary schools seemed to have more implementation problems than primary schools. Further, Porter's study found that smaller schools had more implementation problems than larger schools. Porter also found compatibility with the physical structure of the host school to be positively related to implementation.

In considering the relationship of the school to its environment Porter found that there were implementation problems when the objectives of the project were difficult for the community to understand or when the implementation process itself was perceived as complex by the community. Cooperation from the Schools Commission was positively related to implementation.

Characteristics of School Personnel

Not boding well for the possibilities of a stable teacher population in the future, Porter found "age" and Rand found "years of experience" to be negatively related to implementation effectiveness. Porter also found that the degree of initial enthusiasm and commitment to the project as well as the initial understanding of the both the innovative idea and implementation process to be negatively related to implementation effectiveness which suggests that over-confidence and grandiose expectations may be problematic. However, Porter also found that the perceived ability to change in the directions required by the innovation was highly related to successful implementation. In a somewhat similar vein Rand found the greater the scope of change required of the teacher by the project the higher the implementation effectiveness. Rand also found that a teacher's sense of efficacy in relation to students was related to successful implementation.

It is not appropriate at this time to discuss all the possible implications of these comparative findings. However, it would seem abundantly apparent that much more attention needs to be given to contextual factors at the school level. Clearly policy makers need to focus more on facilitating the implementation stage of innovative projects. This has been said before but it needs to be said again. Gene Hall, in his companion paper to this one, has stressed that "change is a process and not an event" and that American policy makers still seem to wish to ignore this fact. (Hall, 1979). The same comment must also be made regarding Australian educational policy makers. Yet the research discussed here plus an accumulation of many other studies manifestly indicates the need to concentrate on implementation at the school level. This is, after all,

where the action is, and developing a capacity for change at this level is probably the most important thing that government, federal or state can do.

An Interactionist Perspective on Educational Innovations

I want to briefly mention the other perspective I have been using to examine the "mutual adaptation process" of the implementation of educational innovations. This is what I have called an interactionist perspective. This approach was developed with the use of twelve case studies which I conducted in 1977-78 partially in order to flesh out the findings of the earlier survey study. In this capacity the case studies were invaluable in explaining and exploring many of the points made earlier in this paper, particularly those regarding the importance of the implementation strategies and of the organizational settings in which educational innovations must live.

However, I was also interested in placing theoretical perspectives on educational change in abeyance and in getting a better sense of what those involved in the implementation process experienced and perceived. In the case studies under discussion the format used was to interview 10 to 12 people associated with an innovative educational project about the different perceptions they had of the implementation of the project. All interviews were done by the author and one research assistant. The twelve projects were specifically selected because they represented different kinds of ideas, strategies and institutional settings.

At this time, I want to make just a few additional observations on this topic from this point of view. Firstly, none of the work I have done has given me personally as good an intuitive understanding of the process of change as the case studies, particularly because of their comparative nature, i.e. several done at the some time looking at similar features and also because I was personally involved in the on-site interviewing. These comments should simply be regarded as a plug for more comparative case studies on innovation and for personal involvement in the dirty work of research.

Secondly, it is quite apparent when considering different people's perceptions of the implementation of an innovation that if there are ten people involved there are ten different definitions of the situation. Furthermore, it is not obvious that any one of them nor all of them combined is "right". In this situation, to genuinely understand the innovation it really must be seen as a dynamic process rather than a product. What more researchers should try to do is to document the <u>different</u> interpretations for their audiences allowing those audiences to see the dynamic elements for themselves rather than simply summarize and report one "correct" interpretation or description.

Thirdly, the perceptions of those involved in innovative projects vary less on whether the innovation is considered to be effectively implemented or a success and more on the <u>reasons</u> for the effective implementation or success. Since it is precisely the reasons for success or the lack of it that obsess some external observers like myself, then one must expect to end up with a list of determining factors, all of which are relevant to some actor but some of which are not relevant to all actors. On the

other hand, if one is interested only in effective implementation or success in an evaluative sense, then it may be that that is not as difficult a dimension to measure as many have suggested. My experience indicates that self perceptions of success by "innovators" are an accurate index of the state of the project.

Fourthly, with regard to the innovative project itself, in most cases it is quite impossible to separate the innovation from the rest of a school's activities. The more complex and larger the project the more difficult this becomes. Yet this reality is still ignored. Politicians, planners and evaluators want to conceptualize projects as though they are distinct entities. This reflects the "rational approach" discussed earlier: wanting to simply identify the problem, propose the one best solution and monitor the obvious outcomes. Yet conceiving of an educational innovation as a distinct project (even when funded as such) is just not an appropriate description of most innovative ideas as implemented in most schools. In fact the more distinct they are the more likely the implementation is to be problematic. While the reality is certainly messy, surely this "mess" needs to be taken into account in studies of educational innovations. More research on how innovations are assimilated into the rest of a school's activities to be done.

Closely related to this point is the observation that, in general, a new idea being implemented in a school does not really look much at all like the outsider's conception. This is <u>not</u> because teachers are shifty people who resist innovations and who persist in not implementing them the way the originator intended. The comment is equally true when the innovator thought up the idea him or herself (albeit according to

government or bureaucratic guidelines.) The suggestion is that we badly need more studies which view the innovation in its context during implementation from the bottom up. There is at present a reality gap which is bound to lead to inappropriate policies in this area. Gene Hall called this the "practitioner-policy-maker discrepancy" in his research and also pointed out the grave consequences of inapplicable models. (Hall, 1979).

The final point I want to make here is simply a plea for more Australian studies of educational innovations. If we are moving into a period of educational decline in terms of enrolments and expenditure then more than ever we are going to need to know how to support and encourage capacity building for change particularly at the school level.

In conclusion I must stress that there are many different perspectives one can take in the study of educational innovations. In this paper I have referred very briefly to three approaches that interest me: the political perspective, the organizational perspective and the interactionist perspective. What is needed most in the area at this point in time is the linking of these and other approaches from the broad policy level right down to the school and individual teacher level. Cross cultural perspectives are also essential. There has been much work already done on the dynamics of the change process and it is clearly time to put the various pieces of the puzzle together and see just what we have got.

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